Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (currently amended): A method of forming a film <u>having a dielectric</u> constant of 2.55 or less on a substrate, said method comprising:
- (a) positioning the substrate on a non-biased D.C. grounded support in a chamber;
- (b) supplying to the chamber in gaseous or vapour form a silicon-containing organic compound and an oxidizing agent in the presence of a plasma to deposit a film on the substrate positioned on the non-biased grounded support, wherein the plasma is supplied from an RF power source connected to an electrode opposing the grounded support; and
- (c) setting the film such that carbon-containing groups <u>and Si-H bonds</u> are contained therein <u>and the film has a dielectric constant of 2.55 or less</u>, wherein the oxidising agent is oxygen.
 - 2. (cancelled).
- 3. (previously presented): A method according to claim 1, wherein the siliconcontaining organic compound is an alkylsilane.
- 4. (previously presented): A method according to claim 1, wherein the silicon containing organic compound is a tetraalkylsilane.

- 5. (cancelled).
- 6. (previously presented): A method according to claim 1, wherein the siliconcontaining organic compound is a methylsilane.
- 7. (original): A method according to claim 3, wherein the silicon-containing organic compound is cyclohexyldimethoxymethylsilane.
- 8. (currently amended): A method according to claim 1, wherein the grounded supported is at a low temperature during deposition of the film is deposited on a substrate positioned on a low temperature support.
- 9. (currently amended): A method according to claim <u>1</u> [[6]], wherein the <u>grounded</u> support is at a temperature between about 0°C to about 60°C <u>during</u> deposition of the film.
- 10. (currently amended): A method according to claim 6 wherein the grounded support is at about 30°C during deposition of the film.
 - 11 12. (cancelled)
- 13. (currently amended): A method of forming a film <u>having a dielectric</u> constant of 2.55 or less on a substrate, <u>said method</u> comprising:
- (a) positioning the substrate on a non-biased <u>D.C.</u> grounded support in a chamber;

- (b) supplying to the chamber in gaseous or vapour form tetramethylsilane and oxygen in the presence of a plasma to deposit a film on the substrate positioned on the non-biased grounded support in the chamber, wherein the plasma is supplied from an RF power source connected to an electrode opposing the grounded support; and
- (c) setting the film such that carbon-containing groups <u>and Si-H bonds</u> are contained therein and the film has a dielectric constant of 2.55 or less.

14 - 15. (cancelled)

- 16. (previously presented): A method as claims in claim 13 wherein the film is set by exposing it to an H₂ containing plasma without any prior annealing or heating step.
- 17. (original): A method as claimed in claim 16 wherein the H₂ containing plasma is substantially only a H₂ plasma.
- 18. (previously presented): A method as claimed in claim 16 wherein the $\rm H_2$ containing plasma treatment last for between 30 seconds and 30 minutes.
- 19. (previously presented): A method as claimed in claim 16 wherein the H₂ containing plasma treatment lasts from 1 to 10 minutes.
- 20. (previously presented): A method as claimed in claim 16 wherein the H₂ containing plasma treatment step lasts no more than 5 minutes.

- 21. (previously presented): A method as claimed in claim 16 wherein the H₂ containing plasma treatment step lasts no more than 10 minutes.
- 22. (original) A method as claimed in claim 16 where the hydrogen containing plasma is applied simultaneously with heating.
- 23. (original) A method as claimed in claim 22 where the substrate is heated to approximately 400°C.
 - 24. (cancelled).
- 25. (original): A method as claimed in claim 1 where the setting of the film substantially removes water and/or OH peaks from the FTIR spectra of the as deposited film.
 - 26 29. (cancelled)
- 30. (previously presented): A method as claimed in claim 1, wherein said setting includes annealing the film to remove at least one of H₂O and OH from the film with the carbon-containing groups remaining therein.
- 31. (previously presented): A method as claimed in claim 1, wherein said setting includes subjecting the film to a hydrogen-containing plasma to remove at least one of H_2O and OH from the film with the carbon-containing groups remaining therein.

- 32. (previously presented): A method as claimed in claim 13, wherein said setting includes annealing the film to remove at least one of H_2O and OH from the film with the carbon-containing groups remaining therein.
- 33. (previously presented): A method as claimed in claim 13, wherein said setting includes subjecting the film to a hydrogen-containing plasma to remove at least one of H₂O and OH from the film with the carbon-containing groups remaining therein.
- 34. (previously presented): A method as claimed in claim 26, wherein said setting includes annealing the film to remove at least one of H_2O and OH from the film with the carbon-containing groups remaining therein.
- 35. (previously presented): A method as claimed in claim 26, wherein said setting includes subjecting the film to a hydrogen-containing plasma to remove at least one of H_2O and OH from the film with the carbon-containing groups remaining therein.

36 - 37. (cancelled)

- 38. (previously presented): A method according to claim 1, further comprising depositing a resist on the set film and subsequently stripping the resist using oxygen.
- 39. (previously presented): A method according to claim 38, wherein the film is substantially unaffected by the oxygen used in stripping the resist.

- 40. (previously presented): A method according to claim 13, further comprising depositing a resist on the set film and subsequently stripping the resist using oxygen.
- 41. (previously presented): A method according to claim 40, wherein the film is substantially unaffected by the oxygen used in stripping the resist.

42-43. (cancelled)